DOCUMENT RESUME

ED 372 332 CG 025 634

AUTHOR Slade, John
TITLE Facts on Nicotine and Tobacco. Clearinghouse Fact Sheet.
INSTITUTION Rutgers, The State Univ., Piscataway, NJ. Center of Alcohol Studies.
PUB DATE 92
NOTE 4p.; The New Jersey Alcohol/Drug Abuse Resource Center and Clearinghouse serves institutions of higher education, state agencies, communities, and school districts throughout the state of New Jersey by providing technical assistance, training, and resources in alcohol and other drug abuse education and prevention. Clearinghouse fact sheets may be reproduced for educational use.
PUB TYPE Information Analyses (070)

EDRS PRICE MF01/PC01 Plus Postage.
DESCRIPTORS Etiology; Health; Intervention; Pharmacology; *Smoking; Substance Abuse; *Tobacco
IDENTIFIERS *Nicotine; Smoking Cessation

ABSTRACT

Nicotine, the most abused drug in the United States, is the psychoactive drug in tobacco. It exerts diverse, often subtle effects on the central nervous system and can stimulate or relax, or do both simultaneously. Tolerance to this drug develops easily and addiction is common among people with other drug problems, especially alcoholism. Most tobacco use begins in childhood or early adolescence and is due to a number of factors, such as peer pressure, adolescent rebellion, marketing, and easy availability. Nicotine is the most widely promoted drug in the country. Tobacco directly causes one in every six deaths in this country and can lead to heart disease, cancer, respiratory problems, and other maladies. Stopping tobacco use has both immediate and long-term health benefits for the user and his or her family. Although many people stop smoking without formal assistance, that does not mean that quitting is easy. Many quit by relying on informal networks of support among friends and relatives, by restructuring their environment, or by drawing on lessons learned during prior unsuccessful attempts at quitting. Sometimes, all that is required to quit are a few pointers and some simple advice from a health professional. Steps that offer a reasonable chance of bringing the tobacco epidemic under control include: (1) deal with tobacco as part of the overall drug problem; (2) increase excise taxes; (3) countermarket tobacco products with pro-health messages; and (4) require indoor air spaces used by nonsmokers to be free of tobacco smoke pollution. (RJM)

****
* Reproductions supplied by EDRS are the best that can be made *
* from the original document. *
****

ED 372 332

FACTS ON NICOTINE AND TOBACCO

by John Slade

BEST COPY AVAILABLE

CG025634

U.S. DEPARTMENT OF EDUCATION
Office of Educational Research and Improvement
EDUCATIONAL RESOURCES INFORMATION CENTER (ERIC)

☐ This document has been reproduced as received from the person or organization originating it.

☐ Minor changes have been made to improve reproduction quality.

• Points of view or opinions stated in this document do not necessarily represent official OERI position or policy.

"PERMISSION TO REPRODUCE THIS MATERIAL HAS BEEN GRANTED BY

J. S. Battle

2 TO THE EDUCATIONAL RESOURCES INFORMATION CENTER (ERIC)"

New Jersey Alcohol / Drug
RESOURCE CENTER AND CLEARINGHOUSE
Center of Alcohol Studies, Rutgers University

FACTS ON NICOTINE AND TOBACCO

John Slade, M.D.

Nicotine is the most widely abused drug in the United States. It is intensely marketed with advertising and promotion costing about $3.6 billion a year. It is available from more than a million outlets nationwide at low cost in products that are inherently dangerous when used as intended by the manufacturer. Not only can tobacco products cause enormous harm to those addicted to nicotine, but tobacco smoke pollution is a major environmental health risk to all. While many have become abstinent from nicotine without formal help, others benefit from treatment for this addictive disease. Prevention efforts in the U.S. remain rudimentary in proportion to the enormity of the problem, but a number of effective strategies have been demonstrated both here and abroad.

Nicotine is the psychoactive drug in tobacco. An alkaloid, it exerts diverse, often subtle effects on the central nervous system. As with cocaine, the inhaled form of nicotine is the most addictive because inhalation results in faster drug delivery to the brain and in a more concentrated form than when the drug is ingested by other routes. It has the same addictive potential as cocaine and heroin.

Nicotine can stimulate or relax, or do both simultaneously, depending on the state and expectations of the person using the drug. Tolerance develops easily, and acute abstinence is often accompanied by a withdrawal syndrome of irritability, difficulty concentrating, headaches, sleep difficulty, and increased appetite. Withdrawal effects can persist for days to weeks, but individuals usually can see improvement as nicotine-free days add up.

Addiction to nicotine is very common among people with other drug problems, and nicotine use is often linked with the use of other drugs, especially alcohol. While stopping smoking at the same time as stopping the use of other drugs may be difficult, there is no empirical evidence to support the widely held notion that it is a bad idea to stop smoking at the same time one stops taking other drugs that have caused problems. Cigarettes and chewing tobacco have been shown to be "gateway drugs" for other drug problems.

The most widely available form of nicotine is the tobacco cigarette, the smoke from which is inhaled into the lungs. Tobacco is held in the mouth in the case of chewing tobacco and oral snuff, and it is smoked in the forms of pipe tobacco and cigars in a manner that usually does not involve inhalation, although people who switch from cigarettes to pipes often inhale anyway. Tobacco smoke contains over 4,000 different chemicals, including many familiar poisons such as cyanide and formaldehyde. Both tobacco leaf and tobacco smoke contain powerful carcinogens. There is no safe way to use commercial tobacco products. Nicotine is present in several medicines (nicotine gum and nicotine patches) used to alleviate nicotine withdrawal in people who are undergoing treatment for nicotine addiction.

Most tobacco use begins in childhood or early adolescence. It is unusual for people to begin smoking as adults. Each day in the U.S. about 6,000 people, mostly teenagers, begin smoking. The 3,000 of those who become regular smokers just about balance the people who die from smoking or who quit that same day. Nicotine addiction often persists for many years, frequently with brief or even prolonged periods of remission. Sustained abstinence is often achieved: nearly half of all men who have ever smoked regularly have quit.

While people often believe they begin smoking because of peer pressure or adolescent rebellion, environmental forces such as marketing and easy availability, despite laws prohibiting sales to minors, are important factors leading to widespread nicotine addiction. For the past 15 years, females have started to smoke at higher rates than males. As a result, there will soon be more women smoking than men.

Nicotine is the most widely promoted drug in the country. It is associated with an enormous variety of positive traits and characteristics by slick advertising and promotions. Despite a law banning cigarette advertising from television, cigarette brands are featured on numerous sporting event broadcasts. During the 1989 broadcast of the Marlboro Grand Prix, 5,922 Marlboro signs or logos were shown to the national television audience. Marlboro has been the leading "children's" cigarette in the country, attracting about 70% of the high school market, but Camel has recently cut into its lead. Among African-American and Latino groups, Newport is the leading children's brand. Some brands are represented as being healthier, safer, and somehow better for the consumer, despite the fact that the health benefits of smoking lower tar brands are minimal, if any. Much of the tar reductions are achieved by merely diluting smoke with air through more porous paper and through tiny holes drilled in the filter paper with lasers.

Tobacco is the direct cause of one in every six deaths in this country. It causes nine out of ten cases of lung cancer and nine out of ten cases of chronic lung disease. It is one of the three leading causes of heart attacks. Overall, tobacco causes over

CG025634

BEST COPY AVAILABLE

435,000 deaths each year in this country. Oral forms of tobacco cause cancers of the mouth and throat as well as gum disease. Tobacco smoke is harmful to the fetus and to nonsmokers who ingest tobacco smoke from the environment. Tobacco smoking by pregnant mothers is a major cause of low birthweight, perinatal death, and sudden infant death syndrome (SIDS). It can cause lung cancer and fatal heart attacks in adult nonsmokers, and it produces a variety of serious respiratory problems in small children. These problems can be completely prevented if people who do not smoke are protected from exposure to tobacco smoke.

Stopping smoking has immediate and long-term health benefits for the person who smokes and for his or her family. The risk of sudden death goes down practically as soon as the nicotine and the carbon monoxide work their way out of the body, and the chances of having a heart attack steadily fall over the first several years of not smoking to the levels of people who never smoked. Breathing difficulties from bronchitis and emphysema usually stabilize and often improve, and the chances of getting cancer gradually diminish. Families benefit from having less tobacco smoke pollution to avoid, from having longer lived relatives, and from having nonsmoking role models.

About 16% of adults who smoke are also addicted to alcohol, and depression is much more common among people who smoke than among nonsmokers. People with either of these additional problems are more likely to need formal treatment for nicotine addiction in order to achieve a stable abstinence. Although many people stop smoking without formal assistance, that does not mean that most of them have an easy time quitting. Many who quit "on their own" do so by arranging an informal network of support among friends and relatives, making sometimes dramatic changes in their environments to reduce the cues and triggers for smoking, and drawing on lessons learned during prior, unsuccessful attempts at quitting.

A large number of people who smoke need help quitting. Sometimes, all that is required are a few pointers and some simple advice from a health agency or a health professional. Other treatments include individual counseling, structured and unstructured groups, the twelve-step recovery program of Nicotine Anonymous, and, in some cases, inpatient therapy. Often, people who are working at becoming abstinent benefit from taking a medication to help with withdrawal or with depression while undergoing treatment. However, medication taken by itself, without an organized treatment program, is without benefit. There is a tendency to gain weight when stopping smoking. However, people who smoke weigh less than people the same age and build who do not smoke, and in quitting the former smokers usually gain the weight they would have had were it not for the nicotine. If weight gain is a concern, a thoughtful program of diet and exercise can help maintain the desired weight.

While the tobacco industry makes over $270 million annually in profits from selling cigarettes and chewing tobacco to minors, the public health effort opposing these forces is comparatively minuscule. The following steps, taken in concert, offer a reasonable chance of bringing the tobacco epidemic under control. Each of these is being used successfully in some places, but all of them have not been tried simultaneously in one place:

- Deal with tobacco as part of the overall drug problem in all drug treatment and prevention programs.
- Increase excise taxes to reduce purchase by minors.
- Ban vending machines and promote observance of age of sale laws.
- Countermarket tobacco products with pro-health messages in diverse and extensive ways.
- Ban anti-health promotions of tobacco products.
- Require adequate, highly visible warnings on all tobacco products.
- Require that all indoor air spaces used by nonsmokers be free of tobacco smoke pollution.

References

Blum, A. (1991). The Marlboro Grand Prix. *New England Journal of Medicine*, 324, 913-917.

DiFranza, J.R., & Tye, J. (1990). Who profits from tobacco sales to children? *Journal of the American Medical Association*, 263, 2784-2787.

Glantz, S., & Parmly, W. (1991). Passive smoking and heart disease. *Circulation*, 83, 1-12.

Pierce, J.P., Gilpin, E., Burns, D.M., et al. (1991). Does tobacco advertising target young people to start smoking? *Journal of the American Medical Association*, 266, 3154-3158.

U.S. Department of Education.(1990). *National Commission on Drug-Free Schools:Report to Congress* . Washington, DC: Author.

U.S. Department of Health and Human Services. (1988). *Nicotine addiction: A Report of the Surgeon General (DHHS Pub. No. (CDC) 88-8406)*. Rockville, MD: Author.

U.S. Department of Health and Human Services. (1990). *Reducing the health consequences of smoking: A Report of the Surgeon General (DHHS Pub. No. (CDC) 89-8411)*. Rockville, MD: Author.

John Slade, M.D.

is an internist specializing in addiction medicine at St. Peter's Medical Center in New Brunswick NJ and at the University of Medicine and Dentistry of New Jersey. He holds an adjunct appointment at the Rutgers Center of Alcohol Studies.

Do not work on the front page is a reproduction of the author's personal [illegible]

The New Jersey Alcohol/Drug Resource Center and Clearinghouse serves institutions of higher education, state agencies, communities, and school districts throughout the state of New Jersey by providing technical assistance, training , and resources in alcohol and other drug abuse education and prevention. For information on the Clearinghouse, call or write to:

NJ Alcohol/Drug Resource Center and Clearinghouse
Center of Alcohol Studies, Smithers Hall-Busch Campus
Rutgers University, Piscataway, NJ 08855-0969
(908) 981 - 0964 FAX (908) 981-8076
© 1992

RUTGERS

CLEARINGHOUSE FACT SHEETS MAY BE REPRODUCED IN ANY QUANTITY FOR EDUCATIONAL USE